



The TX*iR* is a small, lightweight battery-powered pocket transmitter for use with a wide range of lapel microphones. All settings can be read and changed via the infra-red control using the Switch*iR*.

Controls, display and connections



Un/Reset but

Infra-red port

Receives commands from and transmits status information back to the Switch*iR* infra-red controller.

On/Overload indicator

The LED glows green while the TX*iR* is switched on, but will flash orange to indicate an overload in the presence of a high-level audio signal. At this point the low distortion limiter operates.

Yellow reset button

Resets the TX*i*R and turns it on again from sleep mode. Please use the tip of the antenna to press the button.

Battery compartment

Holds a 6LR61 type 9V alkaline battery.

Audio input

Allows a microphone or line-level input to be connected.

SMA antenna connector

SMA socket to which the antenna is connected.

LF cut using SwitchiR

Gives approximately 6dB LF cut at 50Hz, to assist in the reduction of wind noise.

Gain setting using the SwitchiR

Provides eight gain options when used with standard microphones. Position 9 gives maximum gain and each position decreases the gain by approximately 3 to 4dB, giving a total of 3OdB of adjustment. Positions 1 and 0 provide line-level input.

The following table gives the equivalent settings for the TX2020:

TXiR	0	1	2	3	4	5	6	7	8	9
TX2020	8	9	0	1	2	3	4	5	6	7

Note: Positions 0 and 1 (8 and 9 on the TX2020) provide line-level input.

Setting up the TXiR

To set up the TXiR:

- Fit the battery.
- Connect the antenna.
- Switch on by plugging in the microphone or line input cable.
- Check or select the operating frequency.
- Check that the receiver's no signal indicator is not illuminated.
- Check or set the microphone gain.
- Check or set the low frequency cut filter.
- Check the battery status.

These steps are explained below:

Fitting the battery

Press and slide open the battery compartment door. Insert a 6LR61 type 9V alkaline battery with its contacts facing downwards observing the polarity as shown in the battery compartment. Push the battery down against the spring-loaded contacts and slide the battery compartment door closed, pushing against the springloaded contacts. Do not use excessive force:



An electronic resettable fuse protects the transmitter from reverse powering. A low transmitter battery indicator is provided on the *CXiR* receiver and on the *TXiR* transmitter.

Connecting the antenna

Connect the flexible antenna to the SMA connector.

Switching on

Insert the Lemo plug. After a brief red flash, the LED illuminates green. The LED flashes green when the battery voltage falls below 6.5V. The unit should not be used when the battery is low as poor operation may result. The Lemo socket also includes a link which disconnects power when the Lemo plug is removed.

Connecting the audio input

Connect the microphone or line-level input to the six-pin Lemo connector. Both positive and negative bias voltages are provided, enabling the majority of Lavalier microphones to be used with the TX*iR*.

Selecting the operating frequency

You can check or change the operating frequency of the TX*iR* via the infra-red control using the Switch*iR*.

To check the frequency:

• Press MENU. The display shows:



 Align the front of the SwitchiR with the infra-red port on the TXiR and press OK. The display shows the current frequency; for example:



To change the frequency:

 Press OK. The display will alternately flash between showing the frequency and channel number. For example:



• Press (A) or (V) to scroll through the 32 frequencies read from the transmitter until the desired frequency or channel is displayed. For example:



• Point the Switch*iR* at the infra-red port on the TX*iR* and press **OK**. If the command was received successfully the display will show the new set frequency. For example:

FREQUENCY 857.950



Error

Repeat the above steps if an error message is displayed, moving the Switch*iR* closer to the infra-red port.

Setting the gain

The steps between 0-9 gain settings are approximately 3 to 4dB. Set the gain position so that the Overload indicator does not flash on during normal operation.

To check the gain setting:

• Press **MENU** followed by (A). The display will indicate:



• Align the front of the Switch*iR* with the infra-red port of the TX*iR* and press **OK**. The display will show the current transmitter gain setting:



To change the gain setting:

- Press **OK** again. The display will flash the level setting.
- Press (A) or (V) to step between gain settings 0-9 until the required gain setting is displayed. For example:



• Align the front of the Switch*iR* with the infra-red port on the transmitter and press **OK**. If the command was received correctly the display will show the new gain setting. For example:



Otherwise the display shows:

Error

Repeat the previous steps if an error message is displayed, moving the Switch*iR* closer to the infrared port.

Setting the low frequency cut filter

The LF cut filter gives an approximately 6dB cut at 50Hz to reduce handling and wind noise. To check the status of the low frequency cut filter:

- Press MENU
- Press (A) twice until the display shows:



• Align the front of the Switch*iR* with the infra-red port on the transmitter and press **OK**. The current LF cut filter setting is displayed; for example:



To change the filter setting:

- Press **OK** again. The current setting will flash.
- Press (A) or (V) to toggle between ON or OFF until the required setting is displayed.

• Align the front of the Switch*iR* with the infra-red port on the transmitter and press **OK**. If the command was received successfully the new setting will be displayed. For example:



Otherwise the display will show:

Error

Repeat the previous steps if an error message is displayed, moving the Switch*iR* closer to the infra-red port.

Checking the battery status

- Press MENU.
- Press 🔿 three times until the display shows:

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 Align the front of the Switch*iR* with the infra-red port on the transmitter and press **OK**. The display will show the current battery status:



The battery level can also be checked from the receiver; see the appropriate instructions for the receiver.

Infra-red disable

You can protect the TX*iR* from an accidental change of settings, such as in a live performance, by disabling the infra-red port on the transmitter. This will prevent all communication with the transmitter until the yellow reset button is pressed, or the battery is disconnected and reconnected via the microphone plug.

Disabling the infra-red port

- Press MENU
- Press 👿 twice. The display will show:
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• Align the front of the Switch*iR* with the infra-red port on the transmitter and press **OK**. If the command was received successfully the display will show:



Note: Once the infra-red port has been disabled, any subsequent interrogation of the transmitter will give an error display; this is not a fault.

Sleep mode

The TX*iR* can be put into sleep mode using the Switch*iR*. In the sleep mode the TX*iR* uses very little current and the Switch*iR* can still be used to read all settings. When not in use the power should be switched off.

Putting the TXiR into sleep mode

• Press **MENU** followed by 🕖. The display will indicate:



 Align the front of the Switch*iR* with the infra-red port on the transmitter and press **OK**. The display will show:



To switch the transmitter on again:

• Press MENU. The display shows:



 Align the front of the SwitchiR with the infra-red port on the transmitter and press **OK**. The display shows the current frequency; for example:



Alternatively, you can use the yellow reset button to turn the TX*iR* on again.

Technical specification

Frequency range	470MHz-1000MHz
Frequency stability	Better than ETS 300-422
Number of frequencies	32 pre-programmed
Switching bandwidth	Up to 24MHz
Output power	50mW nominal
Gain control range	28dB in 8 steps, plus 2 steps for 600Ω line input
Maximum input level	+8dB gain position 0, 600Ω
Frequency response	50Hz to 18kHz ±1dB
THD	<0.1% at working levels <0.3% at gain position 7 with -6dB input in overload
Battery	9V (IEC 6LR61) Alkaline
Battery life	Typically 6 hours
Size	89 x 60 x 21mm
Weight	135g
Operating temperature range	-20°C to +55°C
Compliant to	ETS 300422 EN 300445(CE) FCC